



PASCOAG
UTILITY DISTRICT

2022 Demand Side Management

Reconciled Full Year Budget Docket 5195

Pascoag Utility District
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April 6, 2023

Ms. Luly Massaro
Clerk of the Commission
Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, RI 02888

Re: Docket 5195

Dear Ms. Massaro,

On behalf of Pascoag Utility District (Pascoag or the District), enclosed are an original and nine copies of Pascoag's Reconciled Demand Side Management Reconciled Full Year Budget for 2022. These submissions include a complete summary of the DSM Budget for 2022 including the activities and expenses, and the approximate energy savings to the District.

This filing is submitted under the terms of the District's Demand Side Management Tariff, currently on file with the commission.

If you have any questions please do not hesitate to contact me.

Very truly yours,

Desarae Dolan
DSM Coordinator

Cc: William Bernstein, Esquire

Highlights of the 2022 DSM Program

Residential Conservation Program:

Home Energy Audits with Weatherization Incentives – A total of 70 home energy audits were performed by Energy New England from January-December. Due to both the growing pipeline of customers developed in recent years and the rebate incentive of \$2,250 for weatherization, customer interest has been high. 26 residential weatherization projects have been completed. There have been 551 LED lightbulbs, 39 smart strips and 57 low-flow showerheads that were directly installed into homes that completed an energy audit. \$74,064.02 was paid for this program in 2022, funded by Regional Greenhouse Gas Initiative (2021-B).

Residential Energy Star Offerings – The District processed 73 appliance rebates comprised of 3 refrigerator buybacks, 10 refrigerator buybacks & purchases, 24 clothes washers, 9 clothes dryers, 7 room air conditioners, 9 dehumidifiers and 1 purifier. The District issued a total of \$4,756 in rebates.

HVAC & Water Heating Program- Interest in the District's HVAC & Water Heating Program has steadily increased. The District rebated 13 ductless mini-splits, 5 ducted mini-splits, 3 central heat pumps and 5 heat pump water heaters. The District is pleased to see customer interest and adoption of these measures growing alongside the audit and weatherization program. The District issued \$12,150.00 in rebates.

Enhanced Incentive HVAC Program- this program intended to rebate electric heat resistant customers up to \$2250 to install energy efficient HVAC equipment, provided they receive a home energy audit and weatherize their home. Four customers were enrolled in the program. 3 received home energy audits and weatherized their home. One customer did not move forward with the energy audit. The three customers that weatherized their home chose not to move forward with purchasing energy efficient HVAC equipment because they wanted to wait to see how much they would receive from the upcoming State HVAC incentive program. This program did not expense any funds in 2022.

Committed for 2021 Programs- The District processed 1 incentives from 2021 that qualified for rebates totaling \$40.00. The rebate was for an air purifier.

Highlights of the 2022 DSM Program

Pilot Program: Landlord/Renter Weatherization Incentives-We enrolled 2 rental properties and 6 tenants into the program. There have been 30 LED lightbulbs and 4 smart strips that were directly installed into the apartments that completed an energy audit. Both rental properties completed weatherization projects and both the landlords and tenants seemed pleased with the process and the results. The total cost for this program was \$11,286.00.

Industrial/ Commercial

Small Business Energy Star Offerings: There is no activity to report.

Committed Funds-Lighting & EE Projects- Pascoag Public Library completed the last two phases of their lighting project. Phase two upgraded the lighting of the rear book area and phase 3 updated their basement lighting. The last two phases of the project cost \$8,525 with Pascoag providing a rebate of \$2,563. Now that all phases of the project are complete, the total project will reduce the library's kWh by 40,344 over the life of the project.

The Wallum Lake Rod and Gun Club completed an exterior lighting project of their skeet and trap shooting fields. The project cost \$28,525 with Pascoag providing a rebate of \$7,820. The project will reduce their annual load by 9.26 kW and provide 111,120 kWh in lifetime electric savings

Potential 2022 Lighting & EE Projects-Pascoag Utility completed two industrial lighting projects at the end of 2022. Zamborano Hospital Power Plant completed the first phase of an interior and exterior LED lighting project that cost \$68,575, with Pascoag Utility providing a \$20,788 rebate. The project will reduce their annual load by 21.01 kW and provide 599,580 in lifetime electric savings. The Clocktowers Apartments completed an LED lighting project in all the common areas that cost \$31,621, with Pascoag Utility providing a \$12,781 rebate. The project will reduce their annual load by 5.72 kW and provide 43,343 kWh in lifetime savings.

LED Street Light Incentive- The DSM Program rebated Pascoag Utility District \$10,000 for the LED Street Light Project that was completed in 2016 in which the District purchased and installed 610 LED Street Lights. This money reduces the Account Receivable from the DSM Program from \$53,096 to \$43,096.

Highlights of the 2022 DSM Program

Administrative

Administrative- The District spent \$21,187.96 on administrative labor, supplies and mileage associated with the various DSM projects.

Energy Consultant-The District spent \$10,000.80 on consulting services provided by Optimal Energy. Optimal Energy provides the District with guidance and recommendations for both the planning and oversight on the DSM program as well as estimates of the realized energy and demand savings from programs.

Program Research and Development- There is no activity to report.

Community Outreach, Marketing & Education

Community Outreach/Education-The District has spent \$13,445.33 on advertisements, billing inserts, fulfillment materials and labor to promote the various energy efficiency programs and incentives we offer.

Pascoag was able to actively participate in community activities for the first time since 2019. Turnout to events has been slowly increasing since pandemic impacts have lessened. Staff were able to meet with hundreds of customers over the course of the year, collect important information from customer surveys and sign up customers for home energy assessments.

Staff visited 4th grade classrooms at Steere Farm Elementary in March which coordinated with their unit on Energy. Staff did a presentation on the role of the electric company in their community as well as the importance of energy efficiency and conservation. They also worked on energy conservation posters for the Earth Day poster contest with the children.

In May, staff tabled at the Burrillville Aging Stronger Lunch and Learn event. 350 Burrillville residents over the age of 55 attended the event. The District had a booth at the event and were able to answer questions and handout flyers with information on our rebate programs. Roughly 300 people visited the booth and were provided information. 36 customers volunteered to fill out surveys regarding their opinions on the District's current and future residential DSM program.

Highlights of the 2022 DSM Program

In June, staff tabled at the Burrillville Family Fair. Over 1,000 Burrillville residents attended the Fair, with 475 attendees visiting our booth and receiving rebate information. In addition, 53 customers filled out DSM program surveys.

The Green Festival was held in September, with roughly 500 Burrillville residents attending the Festival. Information on the DSM program was given out to over 380 attendees at the Pascoag Utility District booth. Additionally, 63 DSM program surveys were completed by PUD customers. Energy New England was able to sign up 22 customers for home energy assessments as well. Attendees visited booths that had information regarding home energy assessments, weatherization, renewable energy, electric vehicles, climate change and energy assistance offerings.

The last Burrillville Aging Stronger Lunch and Learn event of the year was held in October. 347 Burrillville residents over the age of 55 attended the event. The District was able to provide energy saving tips, information on DSM programs and State energy assistance information to 310 attendees.

Jesse Smith Library Partnership- the Jesse Smith Memorial Library in conjunction with the Public Works Department and the Pascoag Utility District encourages students in grades K-5 to create Earth Day Posters depicting why it is important to recycle and conserve energy in Burrillville. A total of twelve winning posters were chosen to be included in a 2023 calendar which also contained energy conservation and recycling tips. The calendars were distributed in December 2022. The District has created space for advertisers in this year's calendars to offset some of the expense. The project initially cost \$3,582.89 but advertising offset \$750.00 of the cost bringing total expenses to \$2,832.89.

Energy Efficiency Management Continuing Education- Staff have attended several free virtual meetings/conferences but has not participated in any offsite meetings at this time. The District spent \$640.00 on an AESP energy efficiency program membership that allow staff to participate in energy efficiency trainings at low or no cost and an online training regarding How to Better Serve All Communities.

The total budget for 2022 was \$225,315.80; with \$109,349.20 collected from customer billing, \$245.61 from carry over 2021 RGGI Funds, \$75,000.00 from 2022 RGGI Funds and the actual carry over funds from 2021 of \$40,720.99. The total expenses to date for 2022 were \$204,355.00.

Exhibit I: 2022 Approved Budget

Pascoag Utility District
Demand Side Management Programs - 2022 Proposed Budget

Estimated carry over from 2021	\$ 38,373
Estimated sales for 2022	\$ 107,456
RGGI Funds	\$ 75,000
Estimated RGGI Fund Carryover 2021	\$ -
Net 2022 budget	\$ 220,829

2022 Proposed Budget

Residential Program

DR2201	Residential Weatherization Program	\$ 60,000	60 audits and weatherization incentives-RGGI Funds
DR2202	Residential ENERGY STAR Offerings	\$ 8,000	Energy Star Appliances and Refrigerator/Freezer Purchase & Buyback Program
DR2203	HVAC & Water Heating Program	\$ 8,000	Central AC, Central Heat Pump, Mini-Split Heat Pumps and Heat Pump Water Heaters
DR2204	Enhanced Incentive HVAC Program	\$ 10,000	4 rebates for electric resistant heat customers who have had an energy audit and weatherized their home
DR2204	Committed for 2021 Programs	\$ 1,500	To accommodate programs with depleted funds from 2021
DR2205	Pilot Program: Landlord/Renter Weatherization Incentives	\$ 30,000	Energy Audits and Weatherization for Rental Units. \$15,000 will come from RGGI Funds
	Net Residential	\$ 117,500	

Industrial/Commercial

DI2201	Small Business ENERGY STAR Offerings	\$ 1,200	ENERGY STAR Equipment and Commercial Appliances
DI2202	Committed Funds- Lighting & EE Projects	\$ 8,576	Ashton Court Mini-Split Project and Wallum Lake Rod & Gun Club LED Lighting Project
DI2203	Potential 2022 Lighting & EE Projects	\$ 32,953	
DI2204	LED Street Light Incentive	\$ 10,000	Public Street Lighting Project
	Net Industrial/Commercial	\$ 52,729	

Administrative

DA2201	Administrative	\$ 21,000	Administrative labor, mileage and supplies.
DA2202	Energy Consultant	\$ 10,000	Energy Consultant to provide guidance and recommendations on DSM program.
DA2203	Program Research and Development	\$ 500	Funds for future development of programs.
	Net Administrative	\$ 31,500	

Community Outreach, Marketing & Education

DC2201	Community Outreach and Education	\$ 14,000	Billing inserts, conservation promotional items, advertisements, community events and EE education
DC2202	Jesse Smith Library Partnership	\$ 3,600	To partner with the Jesse Smith Library on an Energy Efficiency Project.
	Community Events	\$ -	Combined Community Events with Outreach and Education
DC2203	Energy Efficiency Management continuing education	\$ 1,500	Workshops and Conferences related to the DSM program

Net Community Outreach, Marketing & Education	\$ 19,100
Estimated DSM 2022 Budget/ Expenses/ Balance	\$ 220,829

Exhibit II: 2022 Expenses and Balances

Pascoag Utility District
Demand Side Management Programs - 2022 Approved Budget

	<u>Estimated</u>	<u>Actual</u>
Estimated/Actual carry over from 2021	\$ 38,373.00	\$ 40,720.99
Estimated sales for 2022	\$ 107,548.00	\$ 109,349.20
RGGI Funds	\$ 75,000.00	\$ 75,000.00
Estimated/Actual RGGI Fund Carryover 2021	\$ 245.61	\$ 245.61
Net 2021 budget	<u>\$ 221,166.61</u>	<u>\$ 225,315.80</u>

	<u>2022 Approved</u> <u>Budget</u>	<u>Expenses</u> <u>through</u> <u>December 2022</u>	<u>Balance</u>
<u>Residential Program</u>			
DR2201 Residential Weatherization Program	\$ 75,245.61	\$ 74,064.02	\$ 1,181.59
DR2202 Residential ENERGY STAR Offerings	\$ 8,000.00	\$ 4,756.00	\$ 3,244.00
DR2203 HVAC & Water Heating Program	\$ 13,000.00	\$ 12,150.00	\$ 850.00
DR2204 Enhanced Incentive HVAC Program	\$ 5,000.00	\$ -	\$ 5,000.00
DR2205 Committed for 2021 Programs	\$ 1,500.00	\$ 40.00	\$ 1,460.00
DR2206 Pilot Program: Landlord/Renter Weatherization Incentives	\$ 15,000.00	\$ 11,286.00	\$ 3,714.00
Net Residential	\$ 117,745.61	\$ 102,296.02	\$ 15,449.59
<u>Industrial/Commercial</u>			
DI2201 Small Business ENERGY STAR Offerings	\$ 1,200.00	\$ -	\$ 1,200.00
DI2202 Committed Funds- Lighting & EE Projects	\$ 10,400.00	\$ 10,383.00	\$ 17.00
DI2203 Potential 2022 Lighting & EE Projects	\$ 33,568.99	\$ 33,569.00	\$ (0.01)
DI2204 LED Street Light Incentive	\$ 10,000.00	\$ 10,000.00	\$ -
			\$ -
Net Industrial/Commercial	\$ 55,168.99	\$ 53,952.00	\$ 1,216.99
<u>Administrative</u>			
DA2201 Administrative	\$ 21,000.00	\$ 21,187.96	\$ (187.96)
DA2202 Energy Consultant	\$ 10,000.00	\$ 10,000.80	\$ (0.80)
DA2203 Program Research and Development	\$ 500.00	\$ -	\$ 500.00
			\$ -
Net Administrative	\$ 31,500.00	\$ 31,188.76	\$ 311.24
<u>Community Outreach, Marketing & Education</u>			
DC2201 Community Outreach and Education	\$ 14,000.00	\$ 13,445.33	\$ 554.67
DC2202 Jesse Smith Library Partnership	\$ 3,600.00	\$ 2,832.89	\$ 767.11
DC2203 Energy Efficiency Management continuing education	\$ 1,500.00	\$ 640.00	\$ 860.00
Net Community Outreach, Marketing & Education	\$ 19,100.00	\$ 16,918.22	\$ 2,181.78
Adjustment for Actual Sales \$	\$ 1,801.20	\$ -	\$ 1,801.20
Actual DSM 2022 Budget/ Expenses/ Balance	\$ 225,315.80	\$ 204,355.00	\$ 19,779.21

Exhibit III: Savings Associated with DSM Projects

Residential Programs Totals	
Program Expenses	\$102,296
Annual kWh Electric Savings	52,232
Lifetime kWh Electric Savings	592,549
Summer Peak kW Savings	9.4
Participants	164
Lifetime kWh Electric Savings per Participant	3,613
Cost/Lifetime kWh Electric Savings	\$0.17
Lifetime Carbon Reductions (Short Tons)	562

DR2201: Residential Weatherization Program	
Program Expenses	\$74,064
Annual kWh Electric Savings	18,248
Lifetime kWh Electric Savings	155,699
Summer Peak kW Savings	4.80
Participants	80
Lifetime kWh Electric Savings per Participant	1946
Cost/Lifetime kWh Electric Savings	\$0.48

DR2202: Residential ENERGY STAR Offerings	
Program Expenses	\$4,756
Annual kWh Electric Savings	17,326
Lifetime kWh Electric Savings	188,889
Summer Peak kW Savings	2.74
Participants	55
Lifetime kWh Electric Savings per Participant	3,434
Cost/Lifetime kWh Electric Savings	\$0.03

DR2203: HVAC & Water Heating Program	
Program Expenses	\$12,150
Annual kWh Electric Savings	15,384
Lifetime kWh Electric Savings	241,254
Summer Peak kW Savings	1.55
Participants	23
Lifetime kWh Electric Savings per Participant	10,489
Cost/Lifetime kWh Electric Savings	\$0.05

DR2204: Enhanced Incentive HVAC Program	
Program Expenses	\$0
Annual kWh Electric Savings	0
Lifetime kWh Electric Savings	0
Summer Peak kW Savings	0.00
Participants	0
Lifetime kWh Electric Savings per Participant	
Cost/Lifetime kWh Electric Savings	

DR2205: Committed for 2021 Programs	
Program Expenses	\$40
Annual kWh Electric Savings	258
Lifetime kWh Electric Savings	2,321
Summer Peak kW Savings	0.05
Participants	1
Lifetime kWh Electric Savings per Participant	2,321
Cost/Lifetime kWh Electric Savings	\$0.02

DR2206: Pilot Program - Landlord/Renter Weatherization Incentives	
Program Expenses	\$11,286
Annual kWh Electric Savings	1,016
Lifetime kWh Electric Savings	4,386
Summer Peak kW Savings	0.28
Participants	5
Lifetime kWh Electric Savings per Participant	877
Cost/Lifetime kWh Electric Savings	\$2.57

Commercial & Industrial Programs	
Program Expenses	\$53,952
Annual kWh Electric Savings	9,784
Lifetime kWh Electric Savings	107,619
Summer Peak kW Savings	0.7
Participants	4
Lifetime kWh Electric Savings per Participant	26,905
Cost/Lifetime kWh Electric Savings	\$0.50
Lifetime Carbon Reductions (Short Tons)	51

DI2201: Small Business ENERGY STAR Offerings	
Program Expenses	\$0
Annual kWh Electric Savings	0
Lifetime kWh Electric Savings	0
Summer Peak kW Savings	0.00
Participants	0
Lifetime kWh Electric Savings per Participant	
Cost/Lifetime kWh Electric Savings	

DI2202: Committed Funds - Lighting & EE Projects	
Program Expenses	\$10,383
Annual kWh Electric Savings	9,784
Lifetime kWh Electric Savings	107,619
Summer Peak kW Savings	0.7
Participants	2
Lifetime kWh Electric Savings per Participant	53,809
Cost/Lifetime kWh Electric Savings	\$0.10

DI2203: Potential 2022 Lighting & EE Projects	
Program Expenses	\$33,569
Annual kWh Electric Savings	0
Lifetime kWh Electric Savings	0
Summer Peak kW Savings	0.0
Participants	2
Lifetime kWh Electric Savings per Participant	0
Cost/Lifetime kWh Electric Savings	

DI2204: LED Street Light Incentive	
Program Expenses	\$10,000